

GenCore version 4.5  
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## OM protein - protein search, using sw model

Run on: August 28, 2002, 17:32:27 ; Search time 37.53 seconds

(without alignments)  
637.523 Million cell updates/sec

Title: US-09-502-984B-37

Perfect score: 1284

Sequence: 1 KESKKAALLAARGPEELCF.....RKNERLEEEVERLKLQVGER 249

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283138 seqs, 96089334 residues

Total number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :  
1: PIR\_71:\*  
2: PIR1:\*  
3: PIR2:\*  
4: PIR3:\*  
5: PIR4:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	1060	82.6	508	1 ZUHUR	erythropoietin rec
2	877.5	68.3	507	2 A46713	erythropoietin rec
3	875.5	68.2	265	2 S14081	erythropoietin rec
4	869.5	67.7	507	1 A32385	erythropoietin rec
5	171	13.3	625	2 S35317	hematopoietic grow
6	164	12.8	626	2 S37622	proto-oncogene - m
7	146	11.4	579	2 B45266	MPL-K protein prec
8	146	11.4	635	2 A45266	MPL-K protein prec
9	118	9.2	581	2 I45971	interleukin-9 rece
10	114.5	8.9	522	2 B45268	interleukin-9 rece
11	110.5	8.6	634	2 S33339	somatotropin recep
12	110	8.6	831	2 J01655	prolactin receptor
13	108	8.4	281	1 RGBY2	amino acid biosynt
14	107	8.3	608	2 S32823	somatotropin recep
15	104	8.1	616	2 A30304	prolactin receptor
16	103.5	8.1	677	2 S33608	somatotropin-bindi
17	103.5	8.1	830	2 I50455	prolactin receptor
18	103	8.0	638	2 S12136	somatotropin recep
19	99.5	7.7	638	2 B28176	somatotropin recep
20	98	7.6	897	1 A39255	cytokine receptor
21	96.5	7.5	378	2 A40266	interleukin-3 rece
22	95	7.4	814	2 A62051	endopeptidase C1p
23	94	7.3	468	2 A45268	interleukin-9 rece
24	94	7.3	1825	2 C88400	protein H19M22.1 f
25	94	7.3	1825	2 T32828	hypothetical prote
26	92.5	7.2	279	2 B32985	somatotropin-bindi
27	92.5	7.2	638	2 A33505	somatotropin recep
28	92	7.2	2594	2 A57774	kinase-related pro
29	91	7.1	284	2 S27931	Env/v-mpl fusion p

30	91	7.1	292	2 I77525	prolactin receptor
31	91	7.1	303	2 I77524	prolactin receptor
32	91	7.1	608	2 I53269	prolactin receptor
33	90	7.0	467	2 I56896	gene gfi-2 protein
34	90	7.0	485	1 K1BYHA	hexokinase (EC 2.7
35	90	7.0	682	1 H69879	ATP-dependent DNA
36	88.5	6.9	511	2 A37803	beta-fructofuranos
37	88	6.9	288	2 B59405	prolactin receptor
38	88	6.9	376	2 A59405	prolactin receptor
39	88	6.9	622	2 A40144	prolactin receptor
40	88	6.9	841	2 A43254	protein-tyrosine-p
41	87	6.8	310	2 A29884	prolactin receptor
42	87	6.8	412	2 A41070	prolactin receptor
43	87	6.8	610	2 A34631	lactogen receptor
44	87	6.8	610	2 A36116	prolactin receptor
45	86.5	6.7	406	2 F70019	nifs protein homol

## ALIGNMENTS

RESULT 1  
ZUHUR  
erythropoietin receptor precursor - human  
C:Species: Homo sapiens (man)  
C:Date: 12-Feb-1993 #sequence\_revision 05-Apr-1995 #text\_change 22-Jun-1999  
C:Accession: A43799; A60160; A49824; A53958; A55280; I52563  
R:Jones, S.S.; D'Andrea, A.D.; Haines, L.L.; Wong, G.G.  
Blood 76, 31-35, 1990  
A>Title: Human erythropoietin receptor: cloning, expression, and biologic characteriz  
A:Reference number: A43799; MUID:90304340  
A:Accession: A43799  
A:Molecule type: mRNA  
A:Residues: 1-508 <CON>  
A:Cross-references: GB:M60459; NID:q182244; PIDN:AAA52403.1; PID:q182245  
R:Winkelmann, J.C.; Penny, L.A.; Deaven, L.L.; Forget, B.G.; Jenkins, R.B.  
Blood 76, 24-30, 1990  
A>Title: The gene for the human erythropoietin receptor: analysis of the coding seque  
A:Reference number: A60160; MUID:90304334  
A:Accession: A60160  
A>Status: not compared with conceptual translation  
A:Molecule type: mRNA; DNA  
R:Nouchi, C.T.; Bae, K.S.; Chiu, K.; Wada, Y.; Schechter, A.N.; Hankins, W.D.  
Blood 78, 2548-2556, 1991  
A>Title: Cloning of the human erythropoietin receptor gene.  
A:Reference number: A49824; MUID:92399733  
A:Accession: A49824  
A:Molecule type: DNA  
A:Residues: 1-508 <NOG>  
A:Cross-references: GB:S45332; NID:q255496; PIDN:AA23271.1; PID:q255497  
A:Experimental source: Placenta  
A>Note: sequence extracted from NCBI backbone (NCBIN:113293, NCBIPI:113294)  
R:Ehrenman, K.; St. John, T.  
Exp. Hematol. 19, 973-977, 1991  
A>Title: The erythropoietin receptor gene: cloning and identification of multiple tra  
A:Reference number: A53958; MUID:91372559  
A:Accession: A53958  
A:Molecule type: mRNA  
A:Residues: 1-508 <EHR>  
R:Penny, L.A.; Forget, B.G.  
Genomics 11, 974-980, 1991  
A>Title: Genomic organization of the human erythropoietin receptor gene.  
A:Reference number: A55280; MUID:92147143  
A:Accession: A55280  
A:Molecule type: DNA  
A:Residues: 1-17,381-387, 'LLEOQODA', 391-395;504-508 <PEN>  
A>Note: sequence modified after extraction from NCBI backbone  
A>Note: the authors translated the codon GAT for residue 31 as B  
R:Maouche, U.; Tournamille, C.; Hattab, C.; Boffa, G.; Cartlon, J.P.; Chretien, S.  
Blood 78, 2557-2563, 1991  
A>Title: Cloning of the gene encoding the human erythropoietin receptor.





[illegible]

C; Keywords: transmembrane protein

[illegible]

RESULT 9  
I45971  
prolactin receptor - bovine  
C:Species: Bos primigenius taurus (cattle)  
C:Date: 16-Aug-1996 #sequence\_revision 16-Aug-1996 #text\_change 28-Jul-2000  
C:Accession: I45971  
R:Scott, P.; Kessler, M.A.; Schuler, L.A.  
Mol. Cell. Endocrinol. 89, 47-58, 1992  
A:Title: Molecular cloning of the bovine prolactin receptor and distribution of prolactin receptor mRNA in the bovine brain  
A:Reference number: I45971; MUID:93246019  
A:Accession: I45971  
A:Status: preliminary; translated from GB/EMBL/DBD  
A:Molecule type: mRNA  
A:Residues: 1-581 <SC0>  
A:Cross-references: GB:I02549; NID:g163617; PIDN:AAA51417.1; PID:g163618  
C:Genetics:  
A:Gene: PRLR  
C:Superfamily: cytokine receptor homology  
i:36-221/Domain: cytokine receptor homology <CRS>

```

Query Match: 9.28; Score 118; DB 2; length 581;
Best Local Similarity 21.98; Pred. No. 0.024;
Matches 48; Conservative 40; Mismatches 101; Indels 30; Gaps

Oy 7 ALLARGPEE---ILCFTERLEDLCVFEEBASAGVPGNFSFSFOLEDEPMKLCRLHO 62
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 20 SLNGQSPPEPKPKLVKCRSPKETFCTWMGEGADGGL-PNITYLVHKKEG---TLIHE 74
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Oy 63 APTARGAIRFECSLPTADTSFVFLRLIRA-----ASGAPRHRVITHINEVLDAVY 116
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 75 CPDYKTGGPNSCYTSKKRTHSLMKMYVLTVNAINOMGISSDPLX---VHTTYIVEEPRA 131
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Oy 117 GLVAVRL--ADESGHYVILRWLPPEPTMTSH--IREELDISAGNGAGSVORVLELGR 170
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 132 NLTLLEKHPEDRKPYLWIKMSPPMPTDYKSGWFLIYQYELRLPEKADWETHETFLKO--T 189
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Oy 171 ECVLSNLGRTRITITAVRARAABESPGGFSAWSEPSL 209
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 190 QLKIFNLTPGQKTYLQJRKCK---PDH-GIYSEMSPESTI 224
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

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RESULT 10  
B45268  
interleukin-9 receptor precursor - human







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